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August 3, 2004

Mary L. Cottrell, Secretary  
Department of Telecommunication and Energy  
One South Station, 2<sup>nd</sup> Floor  
Boston, MA 02202

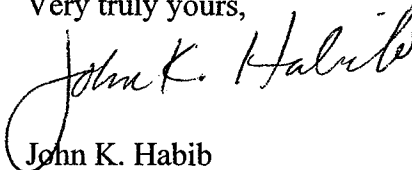
Re: Cambridge Electric Light Company/Commonwealth Electric Company,  
D.T.E. 04-60

Dear Secretary Cottrell:

Enclosed please find the responses of Cambridge Electric Light Company ("Cambridge") and Commonwealth Electric Company ("Commonwealth"), each d/b/a NSTAR Electric ("NSTAR Electric" or the "Companies") to discovery questions asked by the Attorney General in the above-referenced proceeding, as listed on the following Discovery Log.

Thank you for your attention to this matter.

Very truly yours,



John K. Habib

Enclosures

cc: Service List  
Joan Foster Evans, Hearing Officer (2)  
Colleen McConnell, Assistant Attorney General (2)

# LOG OF RESPONSES FILED

**D.T.E. 04-60**

**August 3, 2004**

Response	Status	Other
DTE-1-1	Filed July 22, 2004	Attachment
DTE-1-2	Filed July 22, 2004	
DTE-1-3	Filed July 22, 2004	
DTE-1-4	Filed July 22, 2004	Attachments DTE-1-4 (a) and (b)- Public CD-ROM (REVISED)
DTE-1-5	Filed July 22, 2004	Attachments DTE-1-5 (a) and (b)- Public CD-ROM (REVISED)
DTE-1-6	Filed July 22, 2004	
DTE-1-7	Filed July 22, 2004	
DTE-1-8 <b>CONFIDENTIAL</b>	Filed July 22, 2004	
DTE-1-9	Filed July 22, 2004	
DTE-1-10	Filed July 22, 2004	Attachments - <b>CONFIDENTIAL</b> CD-ROM (REVISED)
DTE-1-11	Filed July 22, 2004	Attachments - <b>CONFIDENTIAL</b> CD-ROM (REVISED)
DTE-1-12	Filed July 22, 2004	
DTE-1-13	Filed July 22, 2004	
DTE-1-14	Filed July 22, 2004	
DTE-1-15	Filed July 22, 2004	
DTE-1-16	Filed July 22, 2004	
DTE-1-17	Filed July 22, 2004	
DTE-1-18	Filed July 22, 2004	
DTE-1-19	Filed July 22, 2004	
DTE-1-20	Filed July 22, 2004	
DTE-1-21	Filed July 22, 2004	
DTE-1-22	Filed July 22, 2004	
DTE-1-23	Filed July 22, 2004	
DTE-1-24	Filed July 22, 2004	
DTE-1-25	Filed July 22, 2004	
DTE-1-26	Filed July 22, 2004	Attachment
DTE-1-27	Filed July 22, 2004	
DTE-1-28	Filed July 22, 2004	
DTE-1-29	Filed July 22, 2004	
DTE-1-30	Filed July 22, 2004	
DTE-1-31	Filed July 22, 2004	
DTE-1-32	Filed July 22, 2004	Attachment- <b>CONFIDENTIAL</b> – CD-ROM (REVISED)
DTE-1-32 (Supp)	Filed July 27, 2004	Attachment

Response	Status	Other
DTE-1-33	Filed July 22, 2004	
DTE-1-34	Filed July 22, 2004	
DTE-1-35	Filed July 22, 2004	Attachment
AG-1-1	Filed July 22, 2004	Attachments AG-1-1 (a) through (v)
AG-1-2	Filed July 22, 2004	Attachment AG-1-2- <b>CONFIDENTIAL</b> CD-ROM (REVISED)
AG-1-3	Filed July 22, 2004	Attachments AG-1-3(a) and (b)
AG-1-4 <b>CONFIDENTIAL</b>	Filed July 22, 2004	Attachment AG-1-4 - <b>CONFIDENTIAL BULK</b> CD-ROM (REVISED)
		Attachment AG-1-5-(Public Provided in Hard Copy)
AG-1-5	Filed July 26, 2004	Attachment AG-1-5 - <b>CONFIDENTIAL BULK</b> CD-ROM
AG-1-6	Filed July 22, 2004	
AG-1-7	Filed July 22, 2004	Attachment AG-1-7- <b>CONFIDENTIAL</b> CD-ROM (REVISED)
AG-1-8 <b>CONFIDENTIAL</b>	Filed July 22, 2004	Attachment AG-1-8 - <b>CONFIDENTIAL BULK</b> CD-ROM (REVISED)
AG-1-9	Filed July 22, 2004	
AG-1-10	Filed July 22, 2004	Attachment AG-10
AG-1-11	Filed July 22, 2004	
AG-1-12	Filed July 22, 2004	Attachment AG-1-12(a) and (b)
DTE-2-1	Filed August 2, 2004	Attachment DTE-2-1
DTE-2-2	Filed Herewith	
DTE-2-3	Filed Herewith	
DTE-2-4	Filed Herewith	Attachment DTE-2-4(a) <b>CONFIDENTIAL</b> Attachment DTE-2-4(b) <b>CONFIDENTIAL</b>
DTE-2-5	Filed August 2, 2004	
DTE-2-6	Filed August 2, 2004	
DTE-2-7	Filed August 2, 2004	
DTE-2-8	Filed August 2, 2004	
DTE-2-9	Filed August 2, 2004	
DTE-2-10	Filed August 2, 2004	
AG-2-1	Filed July 30, 2004	
AG-2-2	Filed July 30, 2004	Attachment AG-2-2
AG-2-3	Filed July 30, 2004	Attachment AG-2-2(a) <b>CONFIDENTIAL</b> Attachment AG-2-3(b) <b>CONFIDENTIAL</b>
AG-2-4	Filed July 30, 2004	Attachment AG-2-4 <b>CONFIDENTIAL</b>
AG-2-5	Filed July 28, 2004	
AG-2-6	Filed July 28, 2004	
AG-2-7	Filed July 28, 2004	
AG-2-8	Filed July 30, 2004	
AG-2-9	Filed July 28, 2004	
AG-2-10	Filed July 30, 2004	

<b>Response</b>	<b>Status</b>	<b>Other</b>
AG-2-11	Filed July 28, 2004	
AG-2-12	Filed July 30, 2004	
AG-2-13	Filed July 30, 2004	
AG-2-14	Filed July 30, 2004	
AG-2-15	Filed July 30, 2004	
AG-2-16	Filed July 30, 2004	
AG-2-17	Filed July 30, 2004	
AG-2-18	Filed July 28, 2004	
AG-2-19	Filed July 28, 2004	
AG-2-20	Filed August 2, 2004	Attachment AG-2-20 <b>CONFIDENTIAL BULK CD-ROM</b>
AG-2-21	Filed July 30, 2004	Attachment AG-2-21 CD-ROM <b>BULK</b>
AG-2-22	Filed July 30, 2004	
AG-2-23	Filed July 30, 2004	
AG-2-24	Filed July 30, 2004	
AG-2-26	Filed July 30, 2004	
AG-2-27	Filed July 30, 2004	Attachment AG-2-27 CD-ROM <b>CONFIDENTIAL</b>
AG-3-1	Filed August 2, 2004	Attachment AG-3-1 <b>CONFIDENTIAL</b>
AG-3-2	Filed August 2, 2004	Attachment AG-3-2 <b>CONFIDENTIAL BULK</b>
AG-3-3	Filed August 2, 2004	
AG-3-4	Filed August 2, 2004	
AG-3-5	Filed Herewith	Attachment-AG-3-5(a) <b>CONFIDENTIAL</b> Attachment AG-3-5(b) [Exhibit NSTAR-CAM-GOL-2] Attachment AG-3-5(c) <b>CONFIDENTIAL</b> [Exhibit NSTAR-CAM-GOL-3] Attachment AG-3-5(d) <b>CONFIDENTIAL</b> [Exhibit NSTAR-CAM-GOL-4] Attachment AG-3-5(e) <b>CONFIDENTIAL</b> [Exhibit NSTAR-CAM-GOL-5] Attachment AG-3-5(f) <b>CONFIDENTIAL</b> [Exhibit NSTAR-CAM-GOL-6] Attachment AG-3-5(g) <b>CONFIDENTIAL</b> [Exhibit NSTAR-CAM-GOL-7] Attachment AG-3-5(h) <b>CONFIDENTIAL</b> [Exhibit NSTAR-CAM-GOL-8] Attachment AG-3-5(i) [Exhibit NSTAR-COM-GOL-2] Attachment AG-3-5(j) <b>CONFIDENTIAL</b> [Exhibit NSTAR-COM-GOL-3] Attachment AG-3-5(k) <b>CONFIDENTIAL</b> [Exhibit NSTAR-COM-GOL-4] Attachment AG-3-5(l) <b>CONFIDENTIAL</b> [Exhibit NSTAR-COM-GOL-5] Attachment AG-3-5(m) <b>CONFIDENTIAL</b> [Exhibit NSTAR-COM-GOL-6] Attachment AG-3-5(n) <b>CONFIDENTIAL</b> [Exhibit NSTAR-COM-GOL-7] Attachment AG-3-5(o) <b>CONFIDENTIAL</b> [Exhibit NSTAR-COM-GOL-8]
AG-3-6	Filed August 2, 2004	Attachment AG-3-6

<b>Response</b>	<b>Status</b>	<b>Other</b>
AG-3-7	Filed Herewith	Attachment AG-3-7(a) Attachment AG-3-7(b) Attachment AG-3-7(c) <b>CONFIDENTIAL</b>
AG-3-8	Filed August 2, 2004	Attachments AG-3-8(a) through (c)
AG-3-9	Filed August 2, 2004	Attachment AG-3-9
AG-3-10	Filed Herewith	Attachment AG-3-10(a) <b>CONFIDENTIAL BULK CD-ROM</b> Attachment AG-3-10(b) <b>CONFIDENTIAL</b>
AG-3-11	Filed Herewith	
AG-3-12	Filed August 2, 2004	
AG-3-13	Filed August 2, 2004	
AG-3-14	Filed Herewith	Attachment AG-3-14(a) Attachment AG-3-14(b)
AG-3-15	Filed August 2, 2004	
AG-3-16	Filed August 2, 2004	
AG-3-17	Filed August 2, 2004	
AG-3-18	Filed August 2, 2004	

Information Request DTE-2-2

Refer to the Companies' response to IR-DTE-1-31, part 3. Please explain the reasons why the CEA used the theoretical capital structure (50 percent debt and 50 percent equity) instead of the actual capital structure of Cambridge and Commonwealth when valuing the Pittsfield contracts. Provide the actual capital structure for both companies. In addition, recalculate the Exh. NSTAR-RBH-6 using the actual capital structure for both companies.

Response

NSTAR Electric instructed CEA to use 7.82 percent as a discount or hurdle rate based on its calculation of the Weighted Average Cost of Capital (WACC) for each company. NSTAR Electric calculated this by using the target capital structure for each of the Companies and the marginal cost of debt and equity. This is a standard investment analysis procedure as outline in one of the leading finance textbook "Capital Investment and Valuation" by Richard A. Brealey and Stewart C. Myers page 393:

"the most commonly used adjusted discount rate is the after-tax weighted-average cost of capital, or WACC:

$$WACC = r_D(1-t_c) \frac{D}{V} + r_E \frac{E}{V}$$

Here,  $r_D$  and  $r_E$  are the expected rates of return demanded by investors in the firm's debt and equity securities, respectively; D and E are the current market values of debt and equity; and V is the total market value of the firm ( $V = D + E$ )."

In simple words, the net present value of a new investment should exceed the cost of funding the new investment. A new investment should pay for itself on a stand-alone basis. If a company has borrowed debt in the past at a low rate, it would be illogical to use that rate to analyze new investments, if one had to borrow money at a much higher rate to pay for the investment. The reverse is also true. If a company can borrow at 6 percent for a long-term debt issuance to fund an investment, it would be illogical to use the company's historical average cost of debt (8.92 percent for Cambridge and 8.82 percent for Commonwealth) to analyze the investment value. (Note: this analysis is different from Cost of Service where a company is allowed to recover its actual historical costs).

Similarly, if the current capital structure were very different from the target capital structure, it would be illogical to invest based on the current capital structure. For example, if a company had an equity to equity-plus-long-term-debt ratio ("equity ratio")

of 70 percent but a target capital structure of 50 percent, the WACC (hurdle rate) would be much higher if one used the 70 percent equity ratio and the company would not invest in projects that would have contributed to the value of the firm using a marginal cost of money. Finally, the impact of taxes needs to be incorporated because taxes represent a source or use of funds.

The discount rate used in the CEA analysis was the WACC for the two companies based on the incremental cost of capital at the time of the investments.

NSTAR's treasury department provided an estimate of 6 percent for a long-term debt ("LTD") issuance based on its current knowledge of the LTD market. The equity return is the Company's current estimate of its cost of equity. The 50 percent debt equity ratio is the companies' current target capital structures. To determine the after-tax cost of debt, the 6 percent rate was reduced by the 39.225 percent effective tax rate. The resulting calculation of a Weighted Average Cost of Capital is:

<u>Description</u>	<u>Actual Capital Structure</u>	<u>Cost Rate</u>	<u>Weighted Cost of Capital</u>	
			<u>Before Taxes</u>	<u>After Taxes</u>
Debt	50%	6.00%	3.00%	1.82%
Equity	50%	12.00%	6.00%	6.00%
Total	<u>100.00%</u>		<u>9.00%</u>	<u>7.82%</u>

While the precise level of benefits to customers is affected by the regulatory recovery methods, the Company considered that the appropriate hurdle rate to use to analyze all potential buyouts was the WACC for each company.

As stated above, the current capital structure and the historical cost of debt are inappropriate to use to evaluate future capital investment. The actual capital structure for both companies and historical costs of debt and equity are as follows:

NSTAR Electric  
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Person Responsible: Geoffrey O. Lubbock/Robert B. Hevert

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Cambridge

<u>Description</u>	<u>Actual Capital Structure</u>	<u>Cost Rate</u>	<u>Weighted Cost of Capital</u>	
			<u>Before Taxes</u>	<u>After Taxes</u>
Debt	48.65%	8.92%	4.34%	2.64%
Equity	<u>51.35%</u>	11.00%	<u>5.65%</u>	<u>5.65%</u>
Total	<u>100.00%</u>		<u>9.99%</u>	<u>8.29%</u>

Commonwealth

<u>Description</u>	<u>Actual Capital Structure</u>	<u>Cost Rate</u>	<u>Weighted Cost of Capital</u>	
			<u>Before Taxes</u>	<u>After Taxes</u>
Debt	47.75%	8.82%	4.21%	2.56%
Equity	<u>52.25%</u>	12.00%	<u>6.27%</u>	<u>6.27%</u>
Total	<u>100.00%</u>		<u>10.48%</u>	<u>8.83%</u>



Information Request DTE-2-3

Refer to the Companies' response to IR-DTE-1-31 part 3. Please explain the reasons why CEA used 3.6 percent as the after tax cost of debt and 12 percent as the after tax cost of equity when valuing the Pittsfield contracts. Provide a copy of all supporting calculation and workpapers.

Response

Please see the response to Information Request DTE-2-2.

Information Request DTE-2-4

Refer to the Companies' response to IR-DTE-1-33, sensitivity analysis performed by CEA. Please provide the calculation of savings under a 10 percent decrease in energy and fuel prices, and an increase of 10 percent in energy and fuel prices. In addition, compare these numbers with the original filing. Please provide a hard copy and an electronic computer copy of the analysis.

Response

Please refer to the attached two spreadsheets for the calculation of savings under a 10 percent decrease in energy and fuel prices, and an increase of 10 percent in energy and fuel prices (Attachments DTE-2-4(a) **CONFIDENTIAL** and DTE-2-4(b) **CONFIDENTIAL**). Please refer to the table below for a comparison of the newly calculated savings amounts with the original filing.

	Total PV of Above Market Amount	Reduction in Above Market
Original Filing <sup>1</sup>	\$(81,316)	11.65%
10 % Decrease	\$(83,382)	13.83%
10 % Increase	\$(79,251)	9.34%

Please note that the information provided herewith is confidential, proprietary and competitively sensitive and is being provided subject to a Non-Disclosure Agreement between NSTAR Electric and the Attorney General and a forthcoming Motion for Protective Treatment of responses to the Department's and the Attorney General's Second Set of Discovery in this proceeding.

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<sup>1</sup> The base case data was updated in response to Information Request AG-2-14 as a result of discovering a cell error. The analysis herein flows from the updated base case data.

(In \$1,000's)

Line		2004	2005	2006	2007	2008	2009	2010	2011
1	Cambridge Electric								
2	Projected Market Price	\$1,053.23	\$4,377.72	\$3,813.39	\$3,775.99	\$3,952.57	\$4,093.85	\$4,314.51	\$4,557.63
3	Projected Contract Cost	\$4,308.70	\$16,481.45	\$16,644.90	\$15,550.94	\$11,624.51	\$3,721.68	\$3,922.28	\$4,143.30
4	Above Market Amount	\$ (3,255)	\$ (12,104)	\$ (12,832)	\$ (11,775)	\$ (7,672)	\$ 372	\$ 392	\$ 414
5	Present Value [1]	\$ (40,052)							
6									
7									
8	Commonwealth Electric								
9	Projected Market Price	\$1,019.59	\$4,199.11	\$3,681.03	\$3,452.20	\$3,562.01	\$3,668.45	\$3,841.71	\$3,995.02
10	Projected Contract Cost	\$4,190.96	\$15,971.99	\$15,977.83	\$15,136.14	\$11,237.10	\$3,334.96	\$3,492.46	\$3,631.84
11	Above Market Amount	\$ (3,171)	\$ (11,773)	\$ (12,297)	\$ (11,684)	\$ (7,675)	\$ 333	\$ 349	\$ 363
12	Present Value [1]	\$ (39,198)							
13									
14									
15									
16	Total PV of Above Market Amount [1]	\$ (79,251)							
17									
18	Pittsfield Termination Price	\$ (71,847)							
19	Reduction in Above Market	9.34%							
20									
21									
22									
23									
24									
25									

NOTES

[1] Present value at 7.82% as of 10/1/04

Cambridge Projected Contract Cost Summary

Line	Year	Total KWh [1]	Energy Charge [2]	Capacity Charge [3]	Availability Adjustment [4]	Gas Transportation Charge [5]	Capital Costs [6]	Transmission Charge [7]	Total
1	2004								
2	2005								
3	2006								
4	2007								
5	2008								
6	2009								
7	2010								
8	2011								
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

REDACTED

Commonwealth Projected Contract Cost Summary

Line	Year	Total KWh [1]	Energy Charge [2]	Capacity Charge [3]	Availability Adjustment [4]	Gas Transportation Charge [5]	Capital Costs [6]	Total
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1 2004  
2 2005  
3 2006  
4 2007  
5 2008  
6 2009  
7 2010  
8 2011

REDACTED

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Henwood Power and Fuel Forecast Market Prices [1]

Average Annual Prices (Nominal \$)

Line	Year	Power (\$/MW)		Capital Costs [6]		
		NEMA 24/7	SEMA 24/7	Fuel (\$/Mmbtu)		
				Gas	Oil	Coal

- 1 2004
- 2 2005
- 3 2006
- 4 2007
- 5 2008
- 6 2009
- 7 2010
- 8 2011
- 9
- 10
- 11
- 12
- 13

**REDACTED**

Projected Market Price Summary

Line	Year	Total KWh [1]	NEMA Prices (\$/MWh)	SEMA Prices (\$/MWh)	Cambridge Market Prices [2]	Commonwealth Market Prices [3]
1	2004					
2	2005					
3	2006					
4	2007					
5	2008					
6	2009					
7	2010					
8	2011					
9						
10						
11						
12						
13						
14						
15						

**REDACTED**

(in \$1,000's)		2004	2005	2006	2007	2008	2009	2010	2011
Line									
1	Cambridge Electric								
2	Projected Market Price	\$861.74	\$3,581.77	\$3,120.04	\$3,089.45	\$3,233.92	\$3,349.51	\$3,530.06	\$3,728.97
3	Projected Contract Cost	\$4,152.33	\$15,861.19	\$16,023.63	\$15,105.53	\$11,319.04	\$3,721.68	\$3,922.28	\$4,143.30
4	Above Market Amount	\$ (3,291)	\$ (12,279)	\$ (12,904)	\$ (12,016)	\$ (8,085)	\$ (372)	\$ (392)	\$ (414)
5	Present Value [1]	\$ (42,278)							
6									
7									
8	Commonwealth Electric								
9	Projected Market Price	\$834.21	\$3,435.63	\$3,011.75	\$2,824.52	\$2,914.37	\$3,001.46	\$3,143.22	\$3,268.66
10	Projected Contract Cost	\$4,034.59	\$15,351.74	\$15,356.56	\$14,690.73	\$10,931.63	\$3,334.96	\$3,492.46	\$3,631.84
11	Above Market Amount	\$ (3,200)	\$ (11,916)	\$ (12,345)	\$ (11,866)	\$ (8,017)	\$ (333)	\$ (349)	\$ (363)
12	Present Value [1]	\$ (41,103)							
13									
14									
15									
16	Total PV of Above Market Amount [1]	\$ (83,382)							
17									
18	Pittsfield Termination Price	\$ (71,847)							
19	Reduction in Above Market	13.83%							
20									
21									
22									
23									
24									
25									

NOTES

[1] Present value at 7.82% as of 10/1/04



Cambridge Projected Contract Cost Summary

Line	Year	Total KWh [1]	Energy Charge [2]	Capacity Charge [3]	Availability Adjustment [4]	Gas Transportation Charge [5]	Capital Costs [6]	Transmission Charge [7]	Total
1	2004								
2	2005								
3	2006								
4	2007								
5	2008								
6	2009								
7	2010								
8	2011								
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

REDACTED

Commonwealth Projected Contract Cost Summary

Line	Year	Total KWh [1]	Energy Charge [2]	Capacity Charge [3]	Availability Adjustment [4]	Gas Transportation Charge [5]	Capital Costs [6]	Total
------	------	---------------	-------------------	---------------------	--------------------------------	----------------------------------	-------------------	-------

1 2004  
2 2005  
3 2006  
4 2007  
5 2008  
6 2009  
7 2010  
8 2011  
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**REDACTED**

Henwood Power and Fuel Forecast Market Prices [1]

Average Annual Prices (Nominal \$)

Line	Power (\$/MW)		Capital Costs [6]		
	Year	NEMA 24/7	SEMA 24/7	Fuel (\$/Mmbtu)	Coal
				Gas	Oil

1 2004

2 2005

3 2006

4 2007

5 2008

6 2009

7 2010

8 2011

9

10

11

12

13

REDACTED

Projected Market Price Summary

Line	Year	Total KWh [1]	NEMA Prices (\$/MWh)	SEMA Prices (\$/MWh)	Cambridge Market Prices [2]	Commonwealth Market Prices [3]
------	------	---------------	-------------------------	-------------------------	--------------------------------	-----------------------------------

1 2004  
2 2005  
3 2006  
4 2007  
5 2008  
6 2009  
7 2010  
8 2011  
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14  
15

REDACTED

Information Request AG-3-7

Refer to Exhibit NSTAR-RBH-6 and NSTAR-GOL-2 (and supporting exhibits). Please recompute the NPV Savings using a discount rate of 11%. Provide all supporting calculations in the form of working electronic spreadsheet models.

Response

Please refer to Attachment AG-3-7(a) for a revised Exhibit NSTAR-CAM-GOL-2 and Attachment AG-3-7(b) for a revised Exhibit NSTAR-COM-GOL-2. These two attachments include the correction to the NPV formula referred to in the Companies' response to Information Request DTE-2-1.

Please refer to Attachment AG-3-7(c) **CONFIDENTIAL** for a revised Exhibit NSTAR-RBH-6 **CONFIDENTIAL**. Recalculating the NPV savings using a discount rate of 11 percent increases the reduction in above market costs to 12.09 percent from 11.65 percent (with the discount rate of 7.82 percent).

Please note that the information provided herein is confidential, proprietary and competitively sensitive and is being provided subject to a Non-Disclosure Agreement between NSTAR Electric and the Attorney General and a forthcoming Motion for Protective Treatment of responses to the Department's and the Attorney General's Second Set of Discovery in this proceeding.

CAMBRIDGE ELECTRIC LIGHT COMPANY

Year	Transition Base Case		Transition Pittsfield Buyout		Customer Savings
	Col.A	Col.B	Col.C	Col.E	
2004	\$ 5.822	\$ 5.822	\$ 5.822	\$ -	
2005	20.631	20.631	23.448	\$ (2.817)	
2006	18.753	18.753	10.896	\$ 7.857	
2007	15.669	15.669	13.794	\$ 1.875	
2008	9.285	9.285	11.426	\$ (2.141)	
2009	1.258	1.258	1.258	\$ -	
2010	2.685	2.685	2.685	\$ -	
2011	1.080	1.080	1.080	\$ -	
2012	0.973	0.973	0.973	\$ -	
2013	0.876	0.876	0.876	\$ -	
2014	0.892	0.892	0.892	\$ -	
2015	0.891	0.891	0.891	\$ -	
2016	0.685	0.685	0.685	\$ -	
2017	0.750	0.750	0.750	\$ -	
2018	0.763	0.763	0.763	\$ -	
2019	0.752	0.752	0.752	\$ -	
2020	0.793	0.793	0.793	\$ -	
2021	0.998	0.998	0.998	\$ -	
2022	0.075	0.075	0.075	\$ -	
2023	0.101	0.101	0.101	\$ -	
2024	0.101	0.101	0.101	\$ -	
2025	0.066	0.066	0.066	\$ -	
2026	0.086	0.086	0.086	\$ -	
Total	\$ 83.985	\$ 79.211	\$ 79.211	\$ 4.774	
NPV	\$ 62.362	\$ 58.562	\$ 58.562	\$ 3.800	
Discount Rate	11.000%				
Discounted at Cambridge After Tax Discount Rate used in the Company's Restructuring Filing					

Sources:

Col: B from Exhibit NSTAR-CAM-GOL-3, Col.D  
Col: C from Exhibit NSTAR-CAM-GOL-4, Col.D  
Col: D = Col.B minus Col.C

Savings

COMMONWEALTH ELECTRIC COMPANY

Year	Base Case	Pittsfield	Customer
	Revenues	Buyout Revenues	Savings
2004	\$ 74,654	\$ 74,654	\$ -
2005	174,902	174,902	\$ -
2006	178,400	178,400	\$ -
2007	138,764	132,827	\$ 5,937
2008	98,448	100,622	\$ (2,174)
2009	76,608	76,608	\$ -
2010	76,096	76,096	\$ -
2011	75,796	75,796	\$ -
2012	76,565	76,565	\$ -
2013	74,217	74,217	\$ -
2014	76,517	76,517	\$ -
2015	75,539	75,539	\$ -
2016	58,196	58,196	\$ -
2017	14,584	14,584	\$ -
2018	5,357	5,357	\$ -
2019	5,094	5,094	\$ -
2020	5,030	5,030	\$ -
2021	5,321	5,321	\$ -
2022	2,803	2,803	\$ -
2023	1,160	1,160	\$ -
2024	0,404	0,404	\$ -
2025	0,265	0,265	\$ -
2026	0,345	0,345	\$ -
Total	\$ 1,295,065	\$ 1,291,302	\$ 3,763
NPV	\$ 804,388	\$ 801,479	\$ 2,909
Discount Rate	11.000%		
Discounted at Commonwealth After Tax Discount Rate used in the Company's Restructuring Filing			

Sources:

Col: B from Exhibit NSTAR-CAM-GOL-3, Col.D  
Col: C from Exhibit NSTAR-CAM-GOL-4, Col.D  
Col: D = Col.B minus Col.D

(in \$1,000's)		2004	2005	2006	2007	2008	2009	2010	2011
Line									
1	Cambridge Electric								
2	Projected Market Price	\$957.49	\$3,979.75	\$3,466.72	\$3,432.72	\$3,593.25	\$3,721.68	\$3,922.28	\$4,143.30
3	Projected Contract Cost	\$4,230.51	\$16,171.32	\$16,334.26	\$15,328.24	\$11,471.78	\$3,721.68	\$3,922.28	\$4,143.30
4	Above Market Amount	\$ (3,273)	\$ (12,192)	\$ (12,868)	\$ (11,896)	\$ (7,879)	\$ -	\$ -	\$ -
5	Present Value [1]	\$ (38,874)							
6									
7									
8	Commonwealth Electric								
9	Projected Market Price	\$926.90	\$3,817.37	\$3,346.39	\$3,138.36	\$3,238.19	\$3,334.96	\$3,492.46	\$3,631.84
10	Projected Contract Cost	\$4,112.77	\$15,661.87	\$15,667.19	\$14,913.44	\$11,084.36	\$3,334.96	\$3,492.46	\$3,631.84
11	Above Market Amount	\$ (3,186)	\$ (11,844)	\$ (12,321)	\$ (11,775)	\$ (7,846)	\$ -	\$ -	\$ -
12	Present Value [1]	\$ (37,901)							
13									
14									
15									
16	Total PV of Above Market Amount [1]	\$ (76,775)							
17									
18	Pittsfield Termination Price	\$ (67,495)							
19	Reduction in Above Market	12.09%							
20									
21									
22									
23									
24									
25									

NOTES

[1] Present value at 11.0% as of 10/1/04



Cambridge Projected Contract Cost Summary

Line	Year	Total KWh [1]	Energy Charge [2]	Capacity Charge [3]	Availability Adjustment [4]	Gas Transportation Charge [5]	Capital Costs [6]	Transmission Charge [7]	Total
1	2004								
2	2005								
3	2006								
4	2007								
5	2008								
6	2009								
7	2010								
8	2011								
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

REDACTED

Commonwealth Projected Contract Cost Summary

Line	Year	Total KWh [1]	Energy Charge [2]	Capacity Charge [3]	Availability Adjustment [4]	Gas Transportation Charge [5]	Capital Costs [6]	Total
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1 2004  
2 2005  
3 2006  
4 2007  
5 2008  
6 2009  
7 2010  
8 2011  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18

**REDACTED**

Henwood Power and Fuel Forecast Market Prices [1]  
Average Annual Prices (Nominal \$)

Line	Power (\$/MW)		Capital Costs [6]		
	Year	NEMA 24/7	SEMA 24/7	Fuel (\$/Mmbtu)	
				Gas	Oil
					Coal

1 2004

2 2005

3 2006

4 2007

5 2008

6 2009

7 2010

8 2011

9

10

11

12

13

REDACTED

Projected Market Price Summary

Line	Year	Total KWh [1]	NEMA Prices (\$/MWh)	SEMA Prices (\$/MWh)	Cambridge Market Prices [2]	Commonwealth Market Prices [3]
1	2004					
2	2005					
3	2006					
4	2007					
5	2008					
6	2009					
7	2010					
8	2011					
9						
10						
11						
12						
13						
14						
15						

REDACTED

Information Request AG-3-10

Refer to the Companies' response to AG-1-3, CEA invoice for April, 2004. Please provide a copy of the "New Energy 2004 NEPOOL Forecast." Please explain how this study was used in the RFP process. Provide any updates, corrections or revisions to the forecast.

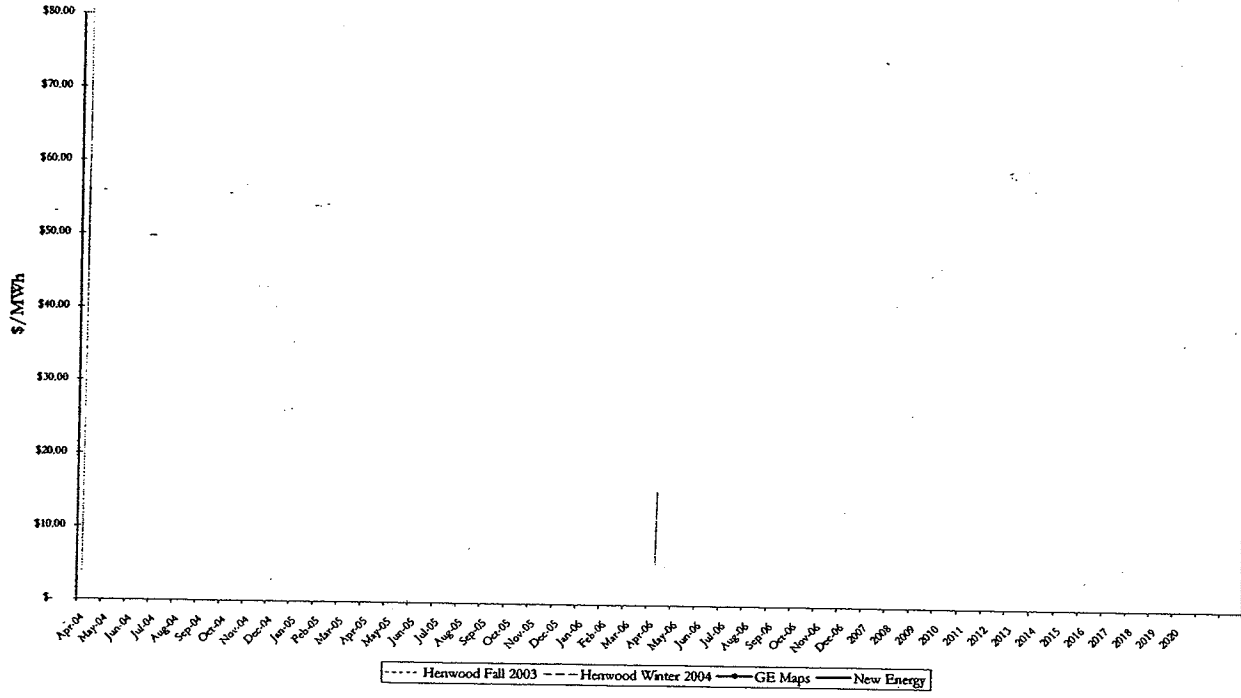
Response

Please see the attached electronic file for the NewEnergy forecast (Attachment AG-3-10(a) **CONFIDENTIAL CD-ROM**). As shown on the graphs provided as AG-3-10(b) **CONFIDENTIAL**, CEA and the Company requested market forecasts from three well-regarded sources, including NewEnergy Associates, Henwood and GE-MAPS. Of those three forecasts, the Henwood projections generally fell between the NewEnergy and GE-MAPS projections. Henwood therefore was selected as the source of forecast data for the savings analyses (see also the Companies' response to Information Request DTE-2-9). Consequently, no updates or corrections were requested from either NewEnergy or GE-MAPS.

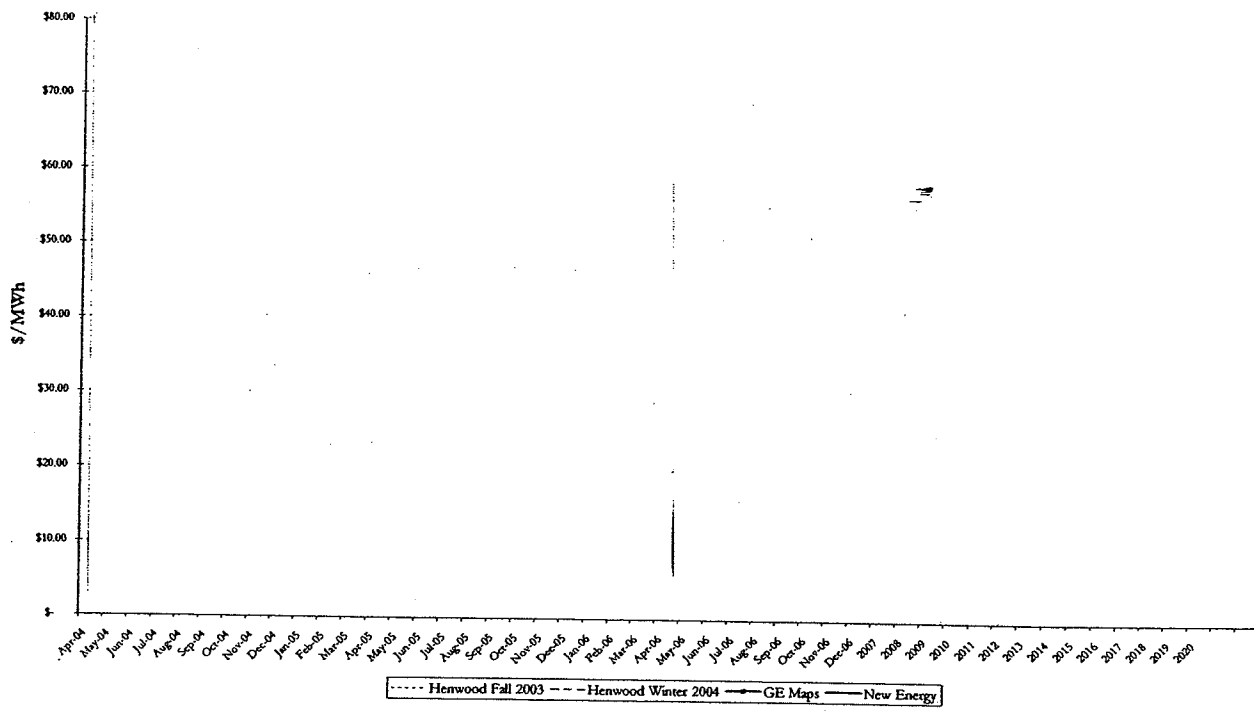
Please note that the information provided herein is confidential, proprietary and competitively sensitive and is being provided subject to a Non-Disclosure Agreement between NSTAR Electric and the Attorney General and a forthcoming Motion for Protective Treatment of responses to the Department's and the Attorney General's Second Set of Discovery in this proceeding.

REDACTED

NEMA 24/7 Comparison



SEMA 24/7 Comparison



REDACTED

Information Request AG-3-11

Refer to the Companies' response to AG-1-3, Attachment AG-1-3(b), the CEA contract, Section 4, pages 1-2. According to this section CEA was to analyze a variety of expected values and risks. Please explain how CEA accomplished this task and provide the results of these analyses/assessments. Explain why and how the analysis that was relied on by Mr. Lubbock and Mr. Hevert in their testimony was selected. This response should include the analyses (in the form of working spreadsheet models) referred to in the response to DTE-1-33.

Response

The present value of the above-market amount provided in Exhibit RBH-6, page 1 of 5 represents the expected value (on a present value basis) of the contract costs and market prices based on a variety of variables including market and fuel prices, inflation escalators, availability factors and capacity factors. In the process of developing the valuation model, which underlies Exhibit RBH-6, CEA and the Company utilized both projected (see Attachment AG-1-2 **CONFIDENTIAL**) and historical data (see Attachment AG-1-10) as the bases for determining the expected value of such variables. CEA then tested the valuation results under market and fuel price scenarios and found that the proposed transaction continued to result in a reduction in above-market costs. Please refer to Attachment DTE-2-4 **CONFIDENTIAL** for an electronic copy of the model which performs the sensitivity analysis referred to in DTE-1-33.

Information Request AG-3-14

If there were no state tax "issues" recalculate the NPV of the buyout for each Company. Provide all supporting calculations, workpapers and assumptions. Explain why customers should accommodate the Companies tax timing issues. Cite to specific Department precedent regarding this issue.

Response

Please refer to Attachment AG-3-14(a) for the NPV of the buyout savings for Cambridge and Attachment AG-3-14(b) for the NPV of the buyout savings for Commonwealth assuming that the payment streams in 2005 and 2006 were not altered to minimize the state tax issues.

The Companies are entering into the termination agreement for these PPAs for the benefit of its customers. Because the buyout amounts paid by the Companies are generally deductible expenses for tax purposes, the revenues received from customers in the transition charges do not require the payment of additional income taxes. However, the tax-deductible amount is based on deducting the expense from otherwise taxable income, and is therefore limited by available income. Because of the MASSPOWER lump-sum buyout, as filed in D.T.E. 04-68, there will be insufficient income available for Commonwealth in 2005 to allow the Company to deduct its full tax-deductible expense for the buyout of the Pittsfield contract, and it will not receive the full potential tax benefit. This loss is somewhat offset by the ability to carry forward the expense for future deductions for federal tax purposes. There is no carry forward or carry back for state taxes, so a small portion of the state tax deductibility is lost. By adjusting the timing of payments from Cambridge and Commonwealth the Companies were able to minimize the tax impact for the Pittsfield transaction. This mechanism has minimal impact on the customers as can be seen by comparing the attachments referenced above to those in the Companies response to DTE-2-1.

The Department has approved recovery of state tax losses in relation to Boston Edison's sale of Pilgrim Station. Boston Edison's transition charge filing in D.T.E. 00-82, included an approximate \$5.7 million amount for adverse tax impacts that arose from the sale of Pilgrim. The Department approved a joint offer of settlement, made by Boston Edison and the Attorney General, in an order dated November 16, 2001.



CAMBRIDGE ELECTRIC LIGHT COMPANY

Year	Transition Base Case		Transition Pittsfield Buyout		Customer Savings	
	Col.A	Col.B	Col.C	Col.D	Col.E	Col.F
2004	\$ 5.822	\$ 5.822	\$ 5.822	\$ -	\$ -	\$ -
2005	20.631	18.451	18.451	\$ 2.180	\$ 2.180	\$ 2.180
2006	18.753	15.906	15.906	\$ 2.847	\$ 2.847	\$ 2.847
2007	15.669	13.794	13.794	\$ 1.875	\$ 1.875	\$ 1.875
2008	9.285	11.426	11.426	\$ (2.141)	\$ (2.141)	\$ (2.141)
2009	1.258	1.258	1.258	\$ -	\$ -	\$ -
2010	2.685	2.685	2.685	\$ -	\$ -	\$ -
2011	1.080	1.080	1.080	\$ -	\$ -	\$ -
2012	0.973	0.973	0.973	\$ -	\$ -	\$ -
2013	0.876	0.876	0.876	\$ -	\$ -	\$ -
2014	0.892	0.892	0.892	\$ -	\$ -	\$ -
2015	0.891	0.891	0.891	\$ -	\$ -	\$ -
2016	0.685	0.685	0.685	\$ -	\$ -	\$ -
2017	0.750	0.750	0.750	\$ -	\$ -	\$ -
2018	0.763	0.763	0.763	\$ -	\$ -	\$ -
2019	0.752	0.752	0.752	\$ -	\$ -	\$ -
2020	0.793	0.793	0.793	\$ -	\$ -	\$ -
2021	0.998	0.998	0.998	\$ -	\$ -	\$ -
2022	0.075	0.075	0.075	\$ -	\$ -	\$ -
2023	0.101	0.101	0.101	\$ -	\$ -	\$ -
2024	0.101	0.101	0.101	\$ -	\$ -	\$ -
2025	0.066	0.066	0.066	\$ -	\$ -	\$ -
2026	0.086	0.086	0.086	\$ -	\$ -	\$ -
Total	\$ 83.985	\$ 79.224	\$ 79.224	\$ 4.761	\$ 4.761	\$ 4.761
NPV	\$ 67.300	\$ 62.913	\$ 62.913	\$ 4.387	\$ 4.387	\$ 4.387
Discount Rate	7.720%					
Discounted at Cambridge After Tax Discount Rate used in the Company's Restructuring Filing						

Sources:

Col: B from Exhibit NSTAR-CAM-GOL-3, Col.D  
Col: C from Exhibit NSTAR-CAM-GOL-4, Col.D  
Col: D = Col.B minus Col.D

Savings

COMMONWEALTH ELECTRIC COMPANY

Year	Base Case	Pittsfield Buyout	Customer Savings
	Revenues	Revenues	Savings
2004	\$ 74,654	\$ 74,654	\$ -
2005	174,902	174,902	\$ -
2006	178,400	178,400	\$ -
2007	138,764	132,897	\$ 5,867
2008	98,448	100,622	\$ (2,174)
2009	76,608	76,608	\$ -
2010	76,096	76,096	\$ -
2011	75,796	75,796	\$ -
2012	76,565	76,565	\$ -
2013	74,217	74,217	\$ -
2014	76,517	76,517	\$ -
2015	75,539	75,539	\$ -
2016	58,196	58,196	\$ -
2017	14,584	14,584	\$ -
2018	5,357	5,357	\$ -
2019	5,094	5,094	\$ -
2020	5,030	5,030	\$ -
2021	5,321	5,321	\$ -
2022	2,803	2,803	\$ -
2023	1,160	1,160	\$ -
2024	0,404	0,404	\$ -
2025	0,265	0,265	\$ -
2026	0,345	0,345	\$ -
Total	\$ 1,295,065	\$ 1,291,372	\$ 3,693
NPV	\$ 891,737	\$ 888,692	\$ 3,045
Discount Rate	8.200%		
Discounted at Commonwealth After Tax Discount Rate used in the Company's Restructuring Filing			

Sources:

Col: B from Exhibit NSTAR-CAM-GOL-3, Col.D  
Col: C from Exhibit NSTAR-CAM-GOL-4, Col.D  
Col: D = Col.B minus Col.D